Drinking Water Protection begins at Home

Safe drinking water is everyone's responsibility. Routine activities such as pesticide use may cause individuals to unwittingly pollute drinking water drawn from wells, lakes, or rivers. By the same token, individuals can take positive actions to safeguard drinking water. **Home*A*Syst** helps individuals identify pollution risks posed by activities in and around the home, while **Farm*A*Syst** helps pinpoint risks related to farms and ranches. Both programs enable individuals to take actions that prevent pollution of drinking water.

Drinking water is only as safe as its source

Many people depend on water suppliers to deliver clean and safe water to their neighborhoods and homes, but they may not appreciate what is needed to protect their drinking water. The Safe Drinking Water Act requires public suppliers to test for over 80 different contaminants before they deliver water to individual homes. Contaminants can come from a variety of sources including household and farm activities. They may come from sources within several miles of a public well or reservoir, or much further away.

Since October 1999, water utility customers started receiving a *Consumer Confidence Report* to notify them about contaminants found in their drinking water. Those who do not receive water bills can contact their water supplier for a copy of the report. These reports should help people think about the need to protect drinking water sources and the steps they can take to prevent pollution.

Source water protection is the first line of defense

While water suppliers can treat water to remove many contaminants, everyone is better off if we prevent the contaminants from entering the water. Sometimes water suppliers cannot discover problems before people become sick. Certain problems may not be easily fixed. Customers may be forced to boil water or drink bottled water. Fixing the problems may be costly. In cases of extensive contamination, communities may have to find alternative drinking water supplies.

Source water protection involves the use of different measures to prevent pollution from entering public sources of drinking water. Prevention saves communities money because it is cheaper than treatment.

Why should people with private wells care?

Private well owners are responsible for protecting the safety of their drinking water. Private wells should be tested annually for nitrates and bacteria. Taking action to prevent pollution enables private well owners to protect their drinking water source – the groundwater – that may serve as a public supply for nearby communities.

Taking Action

Individuals can help prevent contamination of drinking water

Water suppliers cannot protect public drinking water sources without everyone's help. Individual action is needed to prevent pollution from septic systems, soil erosion, pesticide and fertilizer runoff, leaky petroleum storage tanks, and other activities. Farmers can make important contributions through improved management of livestock operations and manure. They can also learn to safely handle and use farm chemicals.

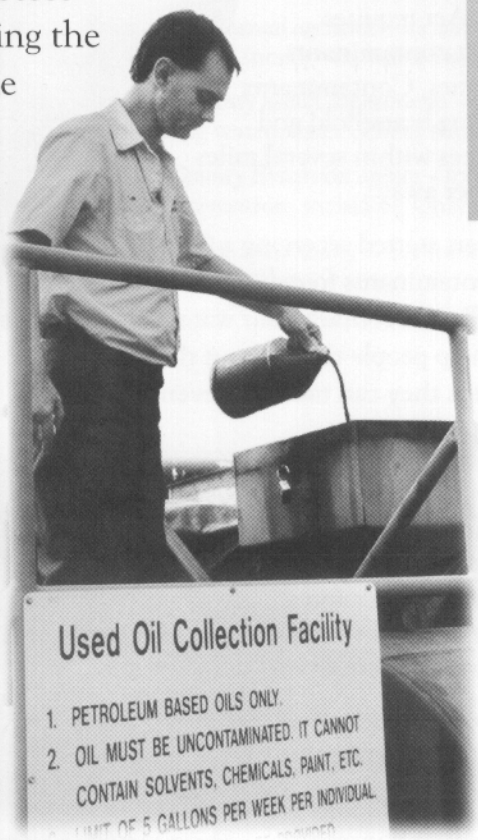
When individuals pursue efforts to protect a community resource, they also can take advantage of opportunities to uncover health problems inside their homes. For example, a water test may reveal high levels of lead from indoor pipes.

Taking action to protect drinking water

Whether you live in the city or country, or drink from a public water supply or a private well, the checklist on the facing page can help you protect drinking water. Start by answering the questions in the checklist on the facing page, skipping those questions that do not apply to you.

Taking action outside the home

Are you involved with a school, factory, office building, motel, campground, restaurant, or other public facility that serves people from its own drinking water well? These facilities need to provide safe and clean water to those who drink it. By answering questions on the facing page, you can see if you are keeping contaminants out of the water served to the public.



Pet waste, used oil and pesticides are among the potential sources of drinking water contamination.

Checklist: If you answer "yes" to a question, then use **Farm*A*Syst/Home*A*Syst** and other resources listed on the back of this brochure to take actions to prevent problems.

In and around the home

- ✔ Is there a potential source of contamination – such as pesticide or fertilizer storage, a petroleum storage tank, or septic system drain field – on your property located within 100 feet of a well or a waterway?
- ✔ Do you have unused or abandoned wells on your property that are not properly closed?
- ✔ Does your property have bare or sparsely planted areas of soil, particularly on slopes, where soil can run off?
- ✔ Do you leave pet waste on the ground where rain can wash the contaminants into surface water?
- ✔ Do you ever pour antifreeze, oil, solvents or other chemicals down a sink drain or toilet, in a storm drain or on the ground?
- ✔ Has it been more than three years since your septic tank was pumped or inspected?
- ✔ Do you have any signs of a failing septic system, such as slow-flowing drains, odors, or soggy ground over the drain field?
- ✔ Do you store fuel or heating oil in an underground fuel tank older than 15 years or an above-ground fuel tank without protection against spills or leaks?

Chemical use (home and farm)

- ✔ Do you store, mix, or apply pesticides or fertilizers without reading label instructions?
- ✔ Do you store, mix or apply pesticides within 100 feet of a well or other water supply?
- ✔ Do you mix water with pesticides without protecting against back flow of pesticides into your water supply?
- ✔ Do you apply pesticides routinely regardless of whether you have found pest problems?
- ✔ Do you apply pesticides without considering pest management options including the selection of resistant plants, removal of habitat for insect pests and use of natural predators?
- ✔ If you use fertilizer, has it been longer than three years since you had your soil tested for nutrients?

Chemical use (farm)

- ✔ Do you rinse out your sprayer tank within 100 feet of your water supply system (well, cistern, etc.) or a water body?
- ✔ Is your emergency plan incomplete because it doesn't list chemicals stored in different facilities, the average quantities stored, a floor plan for each storage facility and procedures for responding to a spill?

Livestock management

- ✔ Is your well or a water body within 100 feet of these pollution sources: livestock or poultry facilities, manure storage facilities, land that has received manure applications?
- ✔ Are animal facilities left unscraped for more than a day, unless they are designed to require less frequent cleaning?
- ✔ Does runoff flow from livestock or poultry facilities without being contained or filtered?
- ✔ Do you store manure without routinely inspecting and maintaining the facility to prevent failures or leaks?
- ✔ Has it been longer than one year since you reviewed your nutrient management plan?
- ✔ Do you apply manure without analyzing nutrients in manure or crediting nutrients in the soil?
- ✔ Do you allow grazing animals to freely enter streams or other waterways?

Worksheets and other assistance

Farm*A*Syst/Home*A*Syst

Nearly every state has a *Farm*A*Syst/Home*A*Syst* program to help you identify environmental and health risks to drinking water. *Home*A*Syst* can help every homeowner with worksheets on private drinking water wells, stormwater management, septic systems, hazardous product management, lead, lawn and garden care, and fuel storage. *Farm*A*Syst* worksheets cover farm activities including the management of livestock facilities and manure, pesticide and fertilizer storage, cropland nutrient and pest management, pasture, and woodlots. Specialized worksheets have been developed for commodities such as cotton, grapes, and potatoes.

For information about *Home*A*Syst* or *Farm*A*Syst* programs in your state, you can locate a local program coordinator by visiting either of these web sites: *Home*A*Syst* (http//www.uwex.edu/homeasyst/) or *Farm*A*Syst* (http://www.uwex.edu/farmasyst). You may also contact the national *Farm*A*Syst/Home*A*Syst* office at 303 Hiram Smith Hall, 1545 Observatory Drive, Madison, WI 53706, Madison, WI 53706-1293, 608-262-0024, email: farmasyst@macc.wisc.edu or homeasyst@macc.wisc.edu. These groups also may have program information: local county Extension office, Soil and Water Conservation District, Natural Resource Conservationist or state water quality agency.

For safe, clean water at home

The resources on this page will help you protect your community's drinking water.

All photos by Margaret Frey, Louisiana State University AgCenter

Other national resources

EPA's Office of Ground Water and Drinking Water
www.epa.gov/ogwdw/protect.html, and EPA's Safe Drinking Water Hotline at 1-800-426-4791 – for information about drinking water safety and protection

National Small Flows Clearinghouse
800-624-8301 – for information on septic system design and maintenance

Water Environment Federation
800-666-0206 – for information on disposal of hazardous products

National Lead Information Center
800-LEAD-FYI – for information packets; 800-424-LEAD for personal assistance

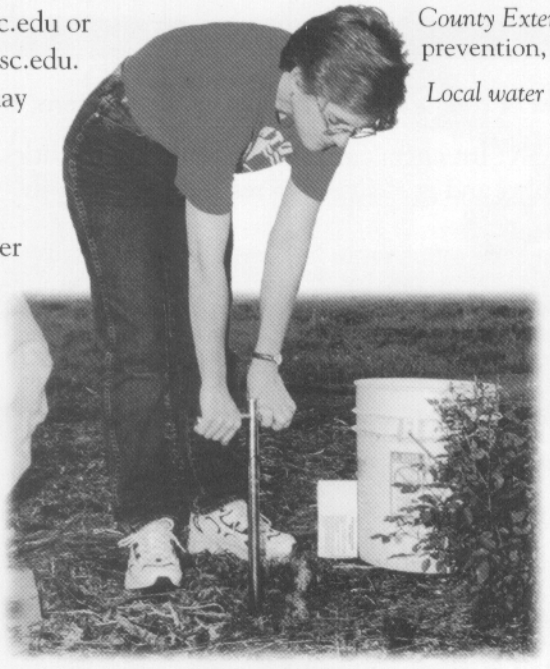
State and local resources

State environmental agencies – for information on petroleum storage tanks, recycling, small business incentives, waste management, and water quality generally

State and county health departments – for information on water testing, contaminants in drinking water, water quality standards, and sanitary codes for septic systems

County Extension agents – for information on farm and home pollution prevention, including University Extension Publications

Local water utility – for information on water conservation



Sampling soil to determine fertilizer needs.

Printed on recycled paper

Farm*A*Syst Home*A*Syst

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